

**EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF THE STATE FIRE MARSHAL
REGARDING THE 2007 CALIFORNIA MECHANICAL CODE
CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 4.**

Legend for Express Terms:

1. California amendments brought forward without modification: *All such language appears in Italics.*
2. California amendments brought forward with modification: *All such language appears in Italics, modified language is underlined.*
3. Uniform Mechanical Code (UMC) language with new California amendment: UMC language is shown in normal Arial 9 pt. California amendments to UMC text appear underlined and in italics.
4. New California amendment: California language appears underlined and in Italics.
5. Repealed text: Shown as ~~Strikeout~~.
6. UMCC text proposed to be removed: Shown as ~~Strikeout~~.

REPEAL OF EXISTING AMENDMENTS AND/OR CALIFORNIA BUILDING STANDARDS NOT ADDRESSED BY MODEL CODES THAT ARE NO LONGER NECESSARY AS FOLLOWS:

CHAPTER 6

CHAPTER 6 – DUCT SYSTEMS

Adopting Agency	BSC	SFM	HCD			DSA		OSHDPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
			1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																			
Adopt Entire Chapter as amended (amended sections listed below)		X																	
Adopt only those sections that are listed below																			
Chapter / Section	Codes																		
<u>602.1</u>	<u>CA</u>	<u>X</u>																	
<u>609.0</u>	<u>CA</u>	<u>X</u>																	

602.1 General. Supply air, return air, and outside air for heating, cooling, or evaporative cooling systems shall be conducted through duct systems constructed of metal as set forth in Tables 6-1, 6-2, 6-3, 6-4, 6-7, 6-8, 6-9, and 6-10, or metal ducts complying with UMC Standard No. 6-2 or the referenced HVAC duct construction standard in Chapter 17. Rectangular ducts in excess of two (2) inches w.g. shall comply with UMC Standard No. 6-2 or the referenced HVAC duct construction standard in Chapter 17. Ducts, plenums, and fittings may be constructed of concrete, clay, or ceramics when installed in the ground or in a concrete slab, provided the joints are tightly sealed.

In other than high-rise buildings, Group A, E, H, I, L and R occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal, corridors shall not be used to convey air to or from rooms if the corridor is required be of fire-resistive construction per the Building Code. In high-rise buildings, Group A, E, H, I, L and R occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal, corridors shall not be used to convey air to or from rooms except where permitted in accordance with section 1017.4 of the California Building Code.

Concealed building spaces or independent construction within buildings may be used as ducts or plenums. When gypsum products are exposed in ducts or plenums, the air temperature shall be restricted to a range from 50°F (10°C) to 125°F (52°C), and moisture content shall be controlled so that the material is not adversely affected. For the purpose of this section, gypsum products shall not be exposed in ducts serving as supply from evaporative coolers, and in other air-handling systems regulated by this chapter when the temperature of the gypsum product will be below the dew point temperature.

See Chapter 8 for limitations on combustion products venting systems extending into or through ducts or plenums.

See Chapter 5 for limitations on environmental air systems exhaust ducts extending into or through ducts or plenums.

Exhaust ducts under positive pressure and venting systems shall not extend into or pass through ducts or plenums. For appliance vents and chimneys, see Chapter 8.

Authority: Health and Safety Code Sections 13143, 17921, 18949.2(b)

References: Health and Safety Code Sections 13143

609.0 Automatic Shutoffs. Air-moving systems supplying air in excess of 2,000 cubic feet per minute (944 L/s) to enclosed spaces within buildings shall be equipped with an automatic shutoff. Automatic shutoff shall be accomplished by interrupting the power source of the air-moving equipment upon detection of smoke in the main supply-air duct served by such equipment. Smoke detectors shall be labeled by an approved agency *approved and listed by California State Fire Marshal* for air duct installation and shall be installed in accordance with the manufacturer's approved *installation* instructions. Such devices shall be compatible with the operating velocities, pressures, temperatures, and humidities of the system. Where fire-detection or alarm systems are provided for the building, the smoke detectors required by this section shall be supervised by such systems *and installed in accordance with NFPA 72 and the California Building and Fire Codes. Air-duct smoke detectors need not be provided where an area smoke detection system or automatic fire sprinkler system is provided within the area served by the air distribution system. The air-moving systems may have the automatic shutoff operated upon activation of the smoke detection system or the waterflow switch within the area served by the air distribution system.*

Exceptions:

- (1) When the space supplied by the air-moving equipment is served by a total coverage smoke-detection system complying with *the California Fire Code*, interconnection to such system may be used to accomplish the required shutoff.
- (2) Automatic shutoff is not required when all occupied rooms served by the air-handling equipment have direct exit to the exterior and the travel distance does not exceed 100 feet (30,480 mm).
- (3) Automatic shutoff is not required for Group R, Division 3 and Group U Occupancies.
- (4) Automatic shutoff is not required for approved smoke-control systems or where analysis demonstrates shutoff would create a greater hazard, such as may be encountered in air-moving equipment supplying specialized portions of Group H Occupancies. Such equipment shall be required to have smoke detection with remote indication and manual shutoff capability at an approved location.
- (5) Smoke detectors that are factory installed in listed air-moving equipment may be used in lieu of smoke detectors installed in the main supply-air duct served by such equipment.

Authority: Health and Safety Code Sections 13143, 17921, 18949.2(b)

References: Health and Safety Code Sections 13143

